Effective Outreach and Analysis Strategies for a Regional Study Area

NORTH I-25 PROJECT, DENVER TO FORT COLLINS AREA, COLORADO
**Case Highlights**

**Description:** The North I-25 project area, located in northern Colorado between Fort Collins and Denver, spreads over 61 miles north to south and 20 to 30 miles east to west, affecting 45 counties and communities. Through consensus building and collaborative decision making, a preferred alternative that addressed the concerns of local stakeholders was identified. Each project alternative (known as packages) proposed multi-modal improvements involving bus, rail and highway improvements on different alignments. Types of highway improvements being considered as part of the multi-modal packages included highway widening, managed lanes, and interchange reconstruction. Transit improvements considered in the multi-modal packages included commuter rail, commuter bus, and bus rapid transit (BRT) on different alignments.

Effective practices in addressing environmental justice included: extensive public outreach that was conducted at a time when minority communities were hesitant to participate in the public process due to the consideration and ultimate adoption of a stricter immigration law in Colorado. It is also notable because it combined transit and highway improvements. The project area is home to various environmental justice groups including the Hmong community, an Asian ethnic group from southern China and Southeast Asia, and Hispanic/Latino ethnic communities that required specialized outreach efforts. Given the large extent of the project area, each community had its own concerns and issues.

**Key concepts:** Strategies for public outreach at a regional scale, considering adverse and beneficial project impacts when determining whether impacts will be disproportionately high and adverse.
Effective Outreach and Analysis Strategies for a Regional Study Area

NORTH I-25 PROJECT, DENVER TO FORT COLLINS AREA, COLORADO

Introduction

I-25 serves as the primary north-south spine in northern Colorado, an area that has experienced steady growth in the last three decades. This corridor also serves as a major link in the nationwide interstate-highway system serving long-distance travel, and is a critical element of the Western Transportation Trade Network (WTTN). As traffic volumes and safety concerns have increased on I-25 and connecting roadways, awareness of the need to plan for transportation improvements in this corridor has grown. The North I-25 Project is a result of years of planning and visioning exercises.

At the outset of the environmental study, the Colorado Department of Transportation (CDOT) was aware that extensive public outreach would be key to arriving at a preferred alternative that would achieve project objectives and minimize harm on local communities. The project alternatives would affect several environmental justice communities located along the I-25 corridor and along the other two major highway corridors: US 85 and US 287. The predominant environmental justice population was of Hispanic/Latino ethnic origin. Particular challenges CDOT had to overcome in addressing environmental justice issues were the very large, regional study area for the project with a widespread affected population, and a local and national political debate on the immigration policy which resulted in reluctance on the part of the Hispanic/Latino minority to participate in public involvement activities.

CDOT identified environmental justice communities by looking beyond traditional sources of data. In addition to minority and low-income residents, the environmental justice analysis also focused on businesses and community facilities frequented and owned by environmental justice populations.

Various multi-modal alternatives being considered in the environmental impact statement (EIS) presented different impacts and challenges for the local environmental justice communities. However, the environmental justice communities were unified in their support for transit options. CDOT worked closely with the environmental justice communities to convey the benefits and impacts of the multi-modal packages to them so that they could, in turn, make informed decisions toward a preferred alternative.

Project Context

Initial Studies

In 1993, CDOT initiated a feasibility study, with a subsequent 1995 Environmental Assessment (EA) and Finding of No Significant Impact (FONSI), for improvements to enhance the capacity and safety of I-25 between State Highway (SH) 7 and SH 66. Subsequently, CDOT, in conjunction with regional planning groups, undertook a major investment study called the North Front Range Transportation Alternatives Feasibility Study (TAFS), to evaluate...
an extensive range of alternative highway improvements, bus-transit alternatives, passenger-rail alternatives, and travel-demand management programs for the corridor from SH 7 to SH 14. This study, published in March 2000, recommended a Vision Plan that included, as major components, an inter-regional bus service, combination general-purpose/high-occupancy vehicle (HOV) lanes, and passenger-rail service.

The North I-25 project and EIS represents the next step in evaluating and planning for implementation of improvements in this corridor.

North I-25 EIS
The regional study area, depicted in Figure 1, spans portions of seven counties and three transportation planning regions (TPRs): the Denver Regional Council of Governments (DRCOG), the North Front Range Metropolitan Planning Organization (NFRMPO), and the Upper Front Range Regional Planning Commission (UFRRPC). It extends from Wellington at the north end to Denver Union Station on the south, and from US 287 and the Burlington Northern and Santa Fe (BNSF) Railway routes on the west to US 85 and the Union Pacific Railroad (UPRR) routes on the east.

FHWA and CDOT were the joint lead agencies under NEPA for the project. FTA was also a lead agency during the DEIS process.

Three Alternatives or multi-modal build packages (Package A, Package B, and the Preferred Alternative) were evaluated. Types of highway improvements being considered as a part of the multi-modal packages include highway widening, managed lanes, and interchange reconstruction. Transit improvements being considered in the multi-modal packages include: commuter rail, commuter bus, and bus rapid transit (BRT) on three different alignments.

The improvements considered would address regional and inter-regional movement of people, goods, and services in the I-25 corridor. The improvements are needed to address mobility, accessibility, safety, and aging infrastructure problems along I-25 as well as to provide for a greater variety of transportation choices.

The North I-25 Project is a multi-phase project which has a 20-year-plus horizon. Only Phase I is funded at this time. As future funding becomes available, subsequent Records of Decision will be prepared to analyze impacts of future phases.

Minority and Low-Income Populations
Major population centers along the alignment included Fort Collins, Greeley, Loveland, and communities in the northern portion of the Denver Metropolitan Area. Minority and low-income populations were identified primarily in and around urban areas, although some were scattered throughout the regional study area (see Figure 2).

Minority Populations
Data from the 2000 United States Census (Census) at the block level were used to identify minority populations. CDOT compared the percentage of minorities in each block to county averages. Any blocks with a higher percentage of minorities than the respective county were targeted for additional outreach and included in the analysis of disproportionately high and adverse effects.

Approximately 27 percent of the blocks within the regional study area (5,709 out of 20,778) had
Figure 1: North I-25 Project region.
Figure 2: Environmental justice populations in the North I-25 Project region based on Census.
a higher percentage of minority persons than the respective counties. Of these blocks; 1,112 (or 20 percent) contained very small populations. For example, there are 60 blocks with two people, one of which is a minority. The block with the largest total population is associated with the Colorado State University (CSU) Campus in Fort Collins. This block contains 4,124 persons, 584 (or 14 percent) of which are minorities living in university housing. Similarly, the block with the greatest total population in Boulder County has a total population of 1,302 persons, 670 (or 51 percent) of which are minority students living in university housing. In general, minority students were not considered permanent residents with critical social and community ties.

People of Hispanic/Latino ethnicity were the largest minority group present in the study area. However, a small Asian ethnic group from southern China and Southeast Asia and the Hmong Community were identified in the northern communities of the regional study area. Analysis of 2000 Census data and community resources revealed that Hmong populations and persons that speak primarily Asian/Pacific Island languages are predominantly located in the Metro Denver Area with small populations in Longmont and Fort Collins. In none of the regional study area Census tracts did more than three percent of the population speak primarily an Asian/Pacific Island language.

**Low-Income Populations**
To derive the low-income threshold, CDOT uses a combination of Census average household size data at the block-group level and low-income thresholds set annually by the Department of Housing and Urban Development (HUD) for the distribution and allocation of Community Development Block Grants. The percentage of low-income households in each block group was compared to county averages. Any block group in the regional study area with a higher percentage of low-income households than that of its respective county was targeted for additional outreach and included in the analysis of disproportionately high and adverse impacts.

Eligibility for the Free/Reduced Lunch Program was also obtained from the U.S. Department of Education, Institute of Education Sciences. Regional study-area schools where 50 percent or more of students are eligible for the Free/Reduced Lunch Program were evaluated.

As shown in Figure 2, low-income populations tended to cluster around transportation routes. For example, concentrations of low-income populations are around US 287 in Lafayette, Longmont, Loveland, and Fort Collins; along US 85 in the Greeley Area; along SH 119 in Boulder; and along I-25 in Fort Collins and the Metro Denver area.

Concentrations of low-income households are also located in single-family homes, apartments, and mobile-home parks in Longmont along the Burlington Northern Santa Fe rail line, south of Greeley along SH 85, and in Gilcrest and Brighton along SH 85.

**Additional Data Sources**
It is important to note that in rural areas block groups are often large and can be miles long. This Census geography typifies many of the Census block groups in the Greeley area. The project team felt that existing data was too broad to accurately represent the social and economic make-up of the households within the regional
study area. For this reason, additional efforts were made to identify minority and low-income populations and services.

These efforts included contacting local planners, non-profit organizations, health and human services, chambers of commerce, and housing authorities. Contacts that yielded information about minority and low-income populations are listed in Table 1. Locations of minority and low-income populations and services identified by these contacts are shown in Figure 3.

Table 1: Additional data sources used to identify environmental justice populations.

<table>
<thead>
<tr>
<th>Source</th>
<th>Date</th>
<th>Source</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>North Central Migrant Education Program</td>
<td>2/26/04</td>
<td>Town of La Salle</td>
<td>8/11/05</td>
</tr>
<tr>
<td>Catholic Charities of Greeley</td>
<td>6/03/04</td>
<td>Boulder Emergency Family Assistance</td>
<td>8/11/05</td>
</tr>
<tr>
<td>Salud Family Health Center in Brighton</td>
<td>6/03/04</td>
<td>Care Housing, Inc.</td>
<td>8/11/05</td>
</tr>
<tr>
<td>Fort Collins Human Rights Office</td>
<td>6/04/04</td>
<td>Casa Vista</td>
<td>8/11/05</td>
</tr>
<tr>
<td>FISH of Broomfield County</td>
<td>6/08/04</td>
<td>Crossroads Safehouse</td>
<td>8/11/05</td>
</tr>
<tr>
<td>Brighton Housing Authority</td>
<td>6/11/04</td>
<td>El Comite</td>
<td>8/11/05</td>
</tr>
<tr>
<td>Fort Collins Neighbor to Neighbor</td>
<td>6/11/04</td>
<td>Fort Collins Home Program</td>
<td>8/11/05</td>
</tr>
<tr>
<td>North College Business Association</td>
<td>6/11/04</td>
<td>House of Neighborly Service</td>
<td>8/11/05</td>
</tr>
<tr>
<td>Loveland Housing Authority</td>
<td>6/15/04</td>
<td>OUR Center</td>
<td>8/11/05</td>
</tr>
<tr>
<td>Urban Renewal Committee of Greeley</td>
<td>6/16/04</td>
<td>Vineyard Christian Fellowship</td>
<td>8/11/05</td>
</tr>
<tr>
<td>Fort Collins Housing Authority</td>
<td>6/17/04</td>
<td>Disabled Resource Center</td>
<td>8/12/06</td>
</tr>
<tr>
<td>Human Services of Loveland</td>
<td>6/21/04</td>
<td>Division of Vocational Rehabilitation</td>
<td>8/12/06</td>
</tr>
<tr>
<td>City of Fort Collins</td>
<td>5/17/06</td>
<td>Erie Food Pantry</td>
<td>8/12/06</td>
</tr>
<tr>
<td>City of Greeley</td>
<td>5/17/06</td>
<td>First Call Service Center</td>
<td>8/12/06</td>
</tr>
<tr>
<td>City of Longmont</td>
<td>5/17/06</td>
<td>Foothills Gateway, Inc.</td>
<td>8/12/06</td>
</tr>
<tr>
<td>City of Westminster</td>
<td>5/17/06</td>
<td>Fort Collins Food Distribution Center</td>
<td>8/12/06</td>
</tr>
<tr>
<td>Town of Eaton</td>
<td>5/17/06</td>
<td>Fort Lupton Food Pantry</td>
<td>8/12/06</td>
</tr>
<tr>
<td>Town of Fort Lupton</td>
<td>5/17/06</td>
<td>Fort Lupton Salud Clinic</td>
<td>8/12/06</td>
</tr>
<tr>
<td>Town of Garden City</td>
<td>5/17/06</td>
<td>Island Grove Community Center</td>
<td>8/12/06</td>
</tr>
<tr>
<td>Town of Gilcrest</td>
<td>5/17/06</td>
<td>La Familia Center</td>
<td>8/12/06</td>
</tr>
<tr>
<td>Town of Wellington</td>
<td>5/17/06</td>
<td>Mental Health Connections</td>
<td>8/12/06</td>
</tr>
<tr>
<td>Town of Frederick</td>
<td>5/18/06</td>
<td>Northside Aztlan Community Center</td>
<td>8/12/06</td>
</tr>
<tr>
<td>Adams County</td>
<td>5/19/06</td>
<td>Planned Parenthood</td>
<td>8/12/06</td>
</tr>
<tr>
<td>City of Loveland</td>
<td>5/29/06</td>
<td>Respite Care, Inc.</td>
<td>8/12/06</td>
</tr>
<tr>
<td>Town of Ault</td>
<td>5/29/06</td>
<td>Rocky Mount SER, Brighton</td>
<td>8/12/06</td>
</tr>
<tr>
<td>Town of Brighton</td>
<td>5/29/06</td>
<td>The Mission Fort Collins</td>
<td>8/12/06</td>
</tr>
<tr>
<td>Town of Johnstown</td>
<td>5/29/06</td>
<td>Weld County Senior Nutrition</td>
<td>8/12/06</td>
</tr>
</tbody>
</table>
Figure 3: Minority and low-income populations and services identified through additional data sources.
What Happened

In December 2003, by issuance of a Notice of Intent to prepare an EIS, FHWA and CDOT set out to identify and evaluate multi-modal transportation improvements along the 61-mile North I-25 corridor. A Draft EIS was released on October 2008, followed by a Final EIS in August 2011. A timeline of major milestones and outreach activities in the NEPA process is shown in Figure 4.

Outreach to Environmental Justice Populations

Hispanic/Latino Communities

It was expected that participation in public-outreach activities by the Hispanic/Latino community would be hindered by the political climate. Some of the public-involvement and specialized outreach activities occurred during consideration and then ultimate adoption of a stricter Colorado law related to immigration and during an electoral campaign where immigration was one of the key issues. Declining participation in planning processes already had been noticed by CDOT. Also, given the scale, multiple phases, and the long horizon for implementation; many members of the Hispanic/Latino community may have considered public meetings as a low-priority event.

Extensive effort was made to inform and involve the Hispanic/Latino community throughout the project: community leaders were identified to build trust and guide public-involvement efforts, small group meetings were held in local communities after regularly scheduled events, informational booths were set up during cultural events and activities, local print and electronic media were used to announce meetings and provide information about the project, flyers were posted in key community locations, and project information was hand delivered to major businesses.

In general, participation in small group meetings was low (several meetings had less than 10 attendees). Small group meetings were held at various locations within the environmental justice communities ranging from farmers markets to places of worship to town halls. Multiple attempts made to distribute information and organize small group meetings in Greeley (a city with concentrations of low-income and minority populations) were met with local resistance. Because of this, fewer small group meetings were held in minority communities than had originally been anticipated.

Community leaders were identified who could serve as liaisons between the project team and environmental justice communities. A well-connected community organizer assisted the project team in contacting political leaders who then recommended others to serve as liaisons. They identified community leaders affiliated with community organizations or churches, and also some government agencies that were active with low-income programs. Forty-two community and church leaders assisted with specialized outreach activities. These liaisons were asked to provide project information to their local communities and communicate any concerns or issues to the project team. Community liaisons also provided guidance on effective outreach strategies.

Specialized outreach included Spanish language newspapers, newsletters, and mailings that announced upcoming meetings and described the project process. In addition, information in Spanish was posted to the project website
throughout the project. A Spanish-language translator was available at the project public meetings to answer questions.

Project fact sheets and flyers about the project and upcoming public-involvement activities were delivered in both English and Spanish to many locations throughout the project where minority and low-income populations might have access to them. These locations ranged from places of worship, family health centers and clinics, and libraries to City and County Offices.

Figure 4: Timeline of milestones and environmental justice outreach.
Hmong Community

Specialized outreach efforts identified the potential for a Hmong population in the northern communities of the regional study area. Consultation with community leaders in the North Front Range revealed that the Hmong population consists of five clans with patriarchs. Hmong community leaders indicated that they would be more responsive to project fact sheets and surveys than community or small group meetings. Based on this information, the project fact sheet, a business survey, and travel survey were translated into Hmong and given to community leaders for distribution to the Hmong population.

Minority Businesses

Minority-owned businesses were initially identified through the Colorado Office of Economic Development and International Trade, Minority Business Office. In all, 56 minority businesses were identified through this resource.

To ensure adequate identification of minority-owned businesses and gather more specific employment information, a business survey was distributed to businesses along key roadway/rail corridors.

Mailing addresses were obtained from parcel data and were extracted for first-, second-, and third-tier businesses from roadways. Using this method, surveys were delivered to 1,297 businesses. In addition to parcel-based mailings, surveys were hand delivered and mailed to targeted locations within the regional study area.

An additional 100 surveys were distributed in targeted locations. Targeted locations were identified using a combination of Census data, field observation, and input received from small group meetings. Business surveys were distributed in both English and Spanish between December and March of 2006. Of the more than 1,400 businesses surveyed, 175 (13 percent) were returned. The survey form mailed to businesses is provided in Figure 5.

In addition, during field surveys, businesses with signs in a different language or selling specialty items (such as a Hispanic/Latino grocery store) were noted and considered.

Summary of Input Received

Hispanic/Latino stakeholders specifically indicated that the immigration policy is a concern for Hispanic/Latino populations throughout the regional study area. Hispanic/Latino populations may not use public transit if they have to show identification or are distrustful of authority. In terms of the highway options, some indicated that they avoid using I-25 because they feel that Hispanic/Latino drivers are pulled over more frequently by the State Highway Patrol.

Most participants said that existing transit lines do not adequately serve minority and low-income communities, including community facilities. Participants also identified key community facilities, minority and low-income neighborhoods, and minority-owned businesses throughout the regional study area. These included but were not limited to local schools, parks, mobile-home parks, Hispanic/Latino businesses, and big box stores. The environmental justice community expressed that, in addition to impacts to their homes, impacts to these community facilities be addressed in the analysis.

Relocation from an existing area of high noise and traffic, for example, next to a freight line, was not considered an adverse impact by the
Figure 5: Survey form given to potentially affected businesses.

<table>
<thead>
<tr>
<th>Question</th>
<th>Response Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name of business</td>
<td></td>
</tr>
<tr>
<td>Business address (Optional)</td>
<td>City</td>
</tr>
<tr>
<td>How long has your business been at this location?</td>
<td></td>
</tr>
<tr>
<td>What types of services does your business provide?</td>
<td></td>
</tr>
<tr>
<td>How many full-time and part-time employees are employed at this location?</td>
<td>Full-Time % Part-Time %</td>
</tr>
<tr>
<td>What percentage of the employees at your company are unskilled workers, e.g., manual laborers?</td>
<td>Unskilled % Skilled or Professional %</td>
</tr>
<tr>
<td>How many minority employees (i.e., African American, Native American, Asian, or Latino) are employed at this location?</td>
<td>Full-Time % Part-Time %</td>
</tr>
<tr>
<td>Does a minority person or persons own this business?</td>
<td>Yes No</td>
</tr>
<tr>
<td>If Yes, Which minority group?</td>
<td></td>
</tr>
<tr>
<td>Are you aware of any transportation issues that your employees may have?</td>
<td>Yes No</td>
</tr>
<tr>
<td>If Yes, please provide details:</td>
<td></td>
</tr>
<tr>
<td>Please estimate the percentage of employees using the following modes of transportation to get to work:</td>
<td>Vehicle % Bus/Transit % Walk % Bicycle % Other %</td>
</tr>
</tbody>
</table>
11. Had you heard of the North I-25 EIS prior to receiving this survey?
Yes _____ No _____

12. If yes, where did you hear about it?
☐ Newspaper articles
☐ Television
☐ Word of mouth
☐ Radio
☐ Public community meetings
☐ Council/Commission meeting
☐ Committee meetings
☐ Don’t remember
Other:

13. How do you prefer to receive information about the North I-25 EIS?
☐ Newspaper articles
☐ Public service announcements
☐ Through a newsletter
☐ The project Web site
☐ Ads in the newspaper
☐ Via E-mail
☐ Public community meetings
Other:

Please return the completed survey in the envelope provided. If you are not presently occupying this address, or if there are multiple businesses at this address, please provide us with a contact or contacts who may be able to answer these questions. If you would prefer to complete this survey over the phone please contact Jessica Woolery with PRACO at (303) 689-0704 or (719) 473-0704.

For questions pertaining to this survey or to the North I-25 project or to be added to the project mailing list, please contact Jessica Woolery with PRACO at (303) 689-0704 or (719) 473-0704 or visit the project website at http://www.dot.state.co.us/NorthI25eis/.

Comments:


Figure 5 (continued): Survey form given to potentially affected businesses.
Key concerns of the environmental justice communities

- Need for transit services between urban centers.
- Need for transit options to reach important community facilities (local schools and churches), regional employment centers and commuter cities.
- Need for transit to be reliable, flexible, and affordable; to accommodate persons with disabilities and bicycles; and operate on weekends and evenings. It was also pointed out that much of the minority community does not work typical business hours and may hold multiple jobs.

The environmental justice community. Also, introduction of commuter rail was seen as an overarching benefit by the community and would outweigh any concerns related to the perception of a barrier created by including a new rail line adjacent to the existing freight rail line in the community.

The environmental justice communities had mixed feelings toward tolled express lanes. While some supported the tolling concept, others felt that tolling would exclude citizens with lower incomes.

Analysis of Impacts

The project team followed CDOT’s “Title VI and Environmental Justice Guidelines for NEPA Projects” to determine whether there was a disproportionate high and adverse impact to any environmental justice populations. These guidelines recommend identifying any areas where both adverse impacts are expected and an environmental justice population is identified. The next step is to analyze adverse impacts to minority or low-income populations in those areas compared to non-minority or low-income populations.

To better inform the decision regarding adverse impacts and benefits on environmental justice populations, the input received during the public outreach was considered.

To help describe and determine whether there would be disproportionately high and adverse impacts on environmental justice populations, impacts associated with each of the components in an alternative (such as an interchange) were generally identified, (e.g., need for right-of-way to accommodate an interchange), the presence of any environmental justice communities or facilities used by the environmental justice communities was noted, and a description of whether any environmental justice populations would be affected was provided. Comparative tables (see example in Table 2) were used to describe the level of impacts within environmental justice populations versus non-environmental justice populations for affected resources.

To identify benefits of the project, community facilities of importance to a minority or low-income population (identified by the environmental justice communities during outreach) that would be better served by the transportation improvements and other mobility or safety benefits that would occur to these populations were identified. The input received from the specialized outreach was a key to determining what the benefit would be.

A summary of adverse effects (after mitigation) and benefits of each alternative was provided in the EIS. In addition, newsletters (also translated in Spanish) with information on benefits and
adverse impacts were distributed to the environmental justice communities and public meetings were held. Contact was made with community leaders to inform them of the public meetings and flyers for the public meetings were placed in family health centers, medical clinics, places of worship, and libraries.

It was determined that the Preferred Alternative would have noticeable impacts on relocations, noise, visual quality, air quality, and community cohesion. Clear benefits included enhanced regional connections between communities, improvements in mobility and access to specific community facilities, improved safety and emergency vehicle access, and improved mobility to transportation-disadvantaged populations.

Mitigation would reduce impacts, but impacts to noise, visual quality/aesthetics, traffic circulation, and air quality would still occur for all environmental justice and non-environmental justice groups. When considered in totality, impacts and benefits from the Preferred Alternative would be distributed equally across minority and low-income as well as non-minority and low-income; and disproportionately high and adverse effects to minority and low-income populations would not occur.

Table 2: Example of a comparative summary table used to help determine whether impacts were disproportionately high and adverse.

<table>
<thead>
<tr>
<th>Minority/Low-Income Populations</th>
<th>Non-Minority/Non-Low-Income Populations</th>
</tr>
</thead>
<tbody>
<tr>
<td>14 residential property displacements (all in Longmont); improved access to Front Range communities, community facilities, and services; potential degradation of community cohesion in Longmont; travel time delays at at-grade crossings</td>
<td>17 residential property displacements (none in Longmont); improved access to Front Range communities, community facilities, and services; travel time delays and out-of-direction travel at at-grade crossings</td>
</tr>
<tr>
<td>1 displacement of business in a census-identified minority area; business is not owned by minorities</td>
<td>8 business displacements</td>
</tr>
<tr>
<td>2024 residences, schools, churches, or parks impacted by rail noise or vibration. Number of impacts reduced to zero after recommended abatement</td>
<td>231 residences, schools, churches, or parks impacted by rail noise or vibration. Number of impacts reduced to zero after recommended abatement actions.</td>
</tr>
<tr>
<td>Localized increase in air emissions affecting populations at five proposed station sites; emissions would not exceed NAAQS</td>
<td>Localized increase in air emissions affecting populations at four proposed station sites; emissions would not exceed NAAQS</td>
</tr>
<tr>
<td>Retaining walls would impact 14 residential areas; One noise wall would impact a low income residential area in Loveland; commuter rail stations would have a visual impact on surrounding communities</td>
<td>Retaining walls would impact 7 residential areas; noise walls would result in a high effect on visual conditions at two locations; commuter rail stations would have a visual impact on surrounding communities</td>
</tr>
</tbody>
</table>
Strategies to Address Impacts
During the analysis of impacts, several design changes were made to avoid and reduce impacts on the environmental justice communities based on the feedback received from those communities. These changes and other strategies to address impacts are summarized in this section.

For All Groups
Some of the minimization and mitigation measures to reduce adverse impacts within all groups, including minority and low-income populations included:

Development of quiet zones to reduce noise impacts. The quiet zones will require lead involvement by the local governments that control the streets that cross the commuter rail corridor. These agencies have indicated support, but participation by the local agencies could not be guaranteed in the EIS. To supplement the quiet zones, CDOT and FHWA intend to construct three noise walls along the rail corridor. Quiet zones are the best and preferred train horn mitigation because they eliminate the noise source. The direct involvement and sponsorship of local government agencies is required for quiet zone implementation. If for any reason, one or more quiet zones cannot be implemented, the recommended mitigation would change to additional noise walls for those locations along the rail corridor.

Use of special trackwork to reduce vibration impacts. Vibration impacts would be eliminated through the strategic use of special trackwork and tire-derived aggregate (TDA) in the construction of commuter rail line. The final decision on the best methods to eliminate the rail vibration impacts will be made at final design.

For Environmental Justice Groups
Mitigation measures designed specifically to address impacts to environmental justice populations were also recommended in the EIS.

Reduced bus prices. Mitigation for construction-related impacts to minority and low-income populations could include the provision of reduced-price bus passes during construction, acceptable access modifications, and translated information on construction processes and alternate modes available during construction and pre-opening day.

Toll payment options. If toll lanes are constructed, ways to make tolling more equitable were recommended. For example, payment options should be considered to enable the broadest opportunity for all economic groups to use toll facilities. Alternate payment options should be provided so that persons who do not have a credit card can still participate in the tolled express lanes. Toll replenishment using cash or employer-based payroll deductions could also be included in the tolling program.

Context sensitive design. A context-sensitive approach to project design and mitigation was encouraged to ensure that project elements enhance the community. This would include involving the public in the development of rail- or bus-station design treatments and incorporating safe pedestrian connections to the community.

Effective Practices and Lessons Learned
Several practices were effective at reaching environmental justice communities, gathering input from them, and assessing impacts in this large study area.
Use extensive public outreach to garner support. Extensive outreach was conducted, as shown in Figure 4, to obtain consensus on a Preferred Alternative among the 45 communities and agencies (including CDOT and FHWA). Extensive public outreach was conducted because of the need for broad community support and limited financial resources available for transportation improvements in the region. Broad community support set the stage for local agency participation, partnerships, and commitment to implementation. Broad community support is also more likely to attract funding.

Look beyond traditional data sources. The analysis looked beyond traditional sources of data. Input on what is important to the environmental justice communities was gathered early in the process and used to determine what would be perceived as a disproportionately high and adverse impact – and to design a better project. The local agencies and communities were involved in data gathering at the local level. Different types of techniques were used to gain input and provide more information about the project from surveys, small meetings, setting up project information booths at cultural events, presenting to city councils, and public meetings and hearings.

Communicate impacts and benefits and gather feedback. Through meetings and newsletters, the project team was able to both provide information on what the project impacts and benefits were to the community and also learn from the community what they thought was an impact and benefit. This feedback helped the team identify issues that were important to environmental justice communities and benefits that would outweigh impacts.

Be sensitive to local and political issues that may keep minority or low-income populations from participating. CDOT identified that the community concern about the new Colorado immigration law may be keeping the immigrant communities from actively engaging in the public process. As a result, CDOT tried to proactively reach out to the community through local leaders to obtain feedback on the project alternatives. Since communities shied away from a public forum, other methods of public outreach were considered; such as, small meetings in the neighborhoods, dissemination of information through newsletters, postings at local businesses and gathering spaces, and identification of local leaders who could collect general feedback.

Determination of adverse impacts is context sensitive. Use the perception of the environmental justice community when determining what constitutes an adverse impact. Relocation is typically considered to be an adverse impact that uproots individuals and families from their communities. Agencies look for ways to reduce relocation impacts of projects to avoid the social and financial cost. However, as in the case of this project, being relocated from an existing location near a freeway or rail line may be perceived as a positive impact by a community. Therefore, how a community perceives an impact is best judged by that community.

Consider benefits and mitigation in the overall harm assessment. Consider the totality of impacts and benefits – that is, carefully identify benefits and mitigation and include those in the analysis of whether there are disproportionately high and adverse impacts.
Consider community facilities in mobility needs. When identifying mobility needs, consider where it is that a particular community member needs to go – employment, community centers, etc. Since car ownership is low within low-income populations, these populations rely more heavily on other modes of transport. They use public transit for all their access needs from going to work, to a place of worship, a health center and schools. Public transit facilities need to connect residential areas to employment centers, and community venues. Conceptual design for public transit stations considered the needs of people with disabilities, such as people in wheelchairs and people who are blind but walk with a guide dog or white cane.

Consider impacts to community facilities. Feedback received during outreach to environmental justice communities was that they were concerned about impacts to community facilities frequented by them. Consider impacts to schools, places of worship, parks, health centers, and businesses frequented by an environmental justice community. Impacts to these communities through relocation or change in access, would affect the community that relies on these facilities. Look beyond impacts to residential areas. Pay special attention to community facilities and how these many be affected within a disadvantaged community.

Speak the local languages. All materials for the project were translated in Spanish. In addition, for the Hmong community, materials were translated in Hmong. It is important to identify the languages spoken by the community and provide language services at meetings for greater participation by the minority community.

Go to the people. Do not expect them to come to you. The project team held small meetings within the environmental justice communities and went to local cultural events to provide information about the project. The project implemented an extensive public outreach program that included technical committees to agency coordination committees to smaller group meetings within environmental justice communities. Conducting smaller meetings within the communities ensured greater participation by the community.

Benefits
The benefit for the community and the lead agency is that a preferred alternative has been chosen which has broad stakeholder support. This assured that the project would get funded and constructed. The community will benefit from improved transit options and better connectivity.

References


Colorado Department of Transportation (CDOT). 2005b. CDOT’s Title VI and Environmental Justice Guidelines for NEPA Projects – Rev.3. May 27.

April 11, 2012. Phone Conversation between Ms. Carol Parr at CDOT, Gina L. McAfee at Jacobs with Shilpa Trisal at ICF International.

April 13, 2012. Phone Conversation between Ms. Monica Pavlik at FHWA with Shilpa Trisal at ICF International.
Contacts
Carol Parr
Colorado Department of Transportation
1420 2nd Street
Greeley, CO 80632
(970) 350-2170

Monica Pavlik
Project Manager, Senior Operations Engineer
Federal Highway Administration
12300 W. Dakota Avenue, Suite 180
Lakewood, CO 80228
(720) 963-3012